# **Phonological Aspects of Jizani Arabic**

# Sami Hamdi

University of New Mexico Jazan University English Language Center

## **Abstract**

There are salient features that distinguish Jizani Arabic such as the deletion and neutralization of particular sounds. Some sounds are specified with others occurring as parts of affixes. The processes of deletion and neutralization of sounds can be explained from morphological and morph syntactic perspectives whose influence rearranges the pronunciation and effects phonological aspects. We studied Jizani Arabic and identified the most important phonological processes in terms of glottal stop deletion, /m/ neutralization in suffix final position, and /m/ insertion in the definite article. These processes are predictable and are thought to be motivated by frequency of usage among speakers.

### 1. Introduction

Jizani Arabic is one of the spoken dialects in the southern parts of Saudi Arabia and it is spoken by about 1. 3 million speakers. In Jizani Arabic, there are three features that distinguish it from other dialects. It is observed that the glottal stop /?/ is deleted word initially in certain environments and retained word medially and finally. Furthermore, it is observed that the nasal /m/ in suffix final position is realized as [n]. This can be seen when comparing Jizani Arabic with standard Arabic as well as many other dialects where nouns take the suffix(-kum) to indicate possessive (masc/mixed) plural pronoun *your*, while verbs take the suffix (-tum) to indicate second (masc/mixed) plural pronoun. The same applies to the suffix /-hum/which is used to indicate third person possessive (masc/mixed) plural pronoun. Obviously, it is important to mention that not all the patterns we are explaining here are used by all speakers of southern parts of Saudi Arabia. The definite article also exhibits a systematic sound change based on the type of referents. In this paper, I will explain and describe a set of phonological aspects that are common in Jizani Arabic along with the factors and environment or context that govern their distributions.

### 2. Data

Data was collected and developed partly by the researcher who is a native speaker of Jizani Arabic as. The other part of the data was collected from the researcher's family members. A variety of words were developed with the target sounds /?, n/ in different positions and diverse environments to study their distributions. The lexical representation is presented in the below tables as the starting point to examine the patterns. Table I below shows the data sets developed to study glottal stop deletion.

Table I: glottal stop deletion

Lexical representation	transcription	gloss	Lexical representation	transcrij	otion gloss
?asri\$	sriS	hurry	?alif	?alif	letter A
?aydar	γdar	green	?alam	?alam	pain
?ashab	shab	friends	?ami:rah	?ami:rah	princess
?aSla	ςla	above	?ala?	?ala?	name
?ahsan	hsan	better	?aða	?aða	harm
?asla\$	slaγ	bald	?usu:d	?usu:d	Lions
?ahmad	hmad	name	mas?ul	mas?ul	officer
?ustad	stad	teacher	su?al	su?al	question
?uktub	ktub	write	la?	1a?	no
?udrus	drus	study (imp)	la?i:m	la?im	mean (adj)
?i\$lan	Slan	advertisement	sa?il	sa?il	liquid
?i⊊sar	Ssar	hurricane	ma?tam	ma?tam	funeral
?insan	nsan	human	ma?	ma?	water

# 3. Analysis

The glottal stop has been observed (Watson, 2007) to occur in a wide range of environments in Arabic. We can clearly notice that in the first column of table I/?/ does not occur word initially, while it occurs word medially and finally as in the second column. However, the glottal stop is not deleted word initially in the third column. Here, we can see that in the first column /?/ is followed by a vowel and two consonants, while in the third column it is followed only by a vowel and one consonant. This suggests that /?/ is deleted word initially when followed by two consonants. It is worth mentioning that vowels in Arabic (Kopczynski and Meliani, 1993) never occur word initially. Thus, the vowels that come after the glottal stop are automatically deleted after the glottal stop deletion. The process for deleting /?/ involves two rules captured in the below derivation:

# Glottal stop deletion

/?/ is deleted word initially when followed by two consonants with any intervening number of vowels.

Rule1: [-son, + constrgl] ->Ø/#\_\_[+syll] C2

# **Vowel deletion**

Vowels are deleted word initially.

Rule 2: [+syll] ->Ø/#\_\_

Gloss	'water'	'officer'	'hurry
Lexical representation/	ma?/	/mas?ul/	/?asri\$/
Glottal stop deletion		_	asriS
<b>Vowel deletion</b>			sriS
Surface form [ma?]	[mas?ul]	[sriS]	

# 4. /m/ neutralization

In Modern standard Arabic /m/ and /n/ are two distinct phonemes and (-kum, -tum -hum) are used as second person suffixes. The final /m/ in these suffixes are realized as [n] inJizani Arabic. Furthermore, the feminine marker /t/, which is attached to the verb final position in the perfect mood, is realized [n]. Table II shows the distribution of /m, n/in various environments.

			-		
Lexical representation	transcription- suffixed forms	gloss	Lexical representation	transcription- unsuffixed forms	gloss
antum	antun	you (plu)	lamsah	lamsah	touch
ataytum	ataytun	you came	χamsah	χamsah	five
Siriftum	Siriftun	you knew	min	min	from
baytakum	baytakun	your house	sum	sum	poison
babakum	babakun	your door	Salim	Salim	scholar
?akalat	?akalan	she ate	sali:m	sali:m	intact
safarat	safaran	she travelled	basmah	basmah	smile (n
kutubukum	kutubukun	your books	ðami:m	ðami:m	ugly
kutubuhum	kutubuhun	their books	nasi:m	nasi:m	breeze

**Table II:** /m, n/ distribution in jizani Arabic

In the first column of table II, /m/ and /t/ are realized [n] in the suffixed forms. In the second column, /m/ occurs in the unsuffixed forms in different environments. The process for realizing /m/ as [n] is captured in the below rule:

#### /m/ neutralization rule

/m/ is realized [n] word finally preceded by a number of sounds and a stem boundary. [+nasal, +labial] ->[-labial, +coronal] / ]stem X \_\_#

Gloss 'breeze' 'poison' 'your door'

Lexical representation/nasi:m/ /sum/ /baba-kum/
/m/ Neutralization\_\_ babakun

Surface form[nasi:m][sum] [babakun]

# 5. /m/ in definite article

Another distinctive aspect of Jizani Arabic is the use of /ʔam/ as a definite article. In Arabic, the definite article ( $J^{\dagger}$ ) or /ʔal/ is attached to the beginning of the nouns. The use of the definite article (L, Mahmood, and M. Tawfeeq, 2006) is based on the type of reference which can be specific, generic, and unique. In all three types the referents are known to the hearers who will be able to understand the intended meaning. In Jizani Arabic, the /l/ in the definite article /ʔal/ is realized /m/ to indicate definiteness when the referents are specific or unique. However, /m/ does not replace [l] if the referent is generic as shown below in table III. This case is similar to the use of /n, m/ for [l] that has been widely common (Watson, 2011) among south Arabian dialects including Yemeni. However, in Jizani Arabic only /m/ is recognized.

Lexical representation	transcription	gloss	Lexical representation	transcription	gloss
?almu:l	?almu:l	the mall	?as:iarah	?amsiarah	the car
?asafara	?asafara	the embassy	?aldʒamal	?amdʒamal	the camel
?an:as	?an:as	people	?alkursi	?amkursi	the seat
?almata:r	?almata:r	the airport	?albab	?ambab	the door
?alyaman	?alyaman	Yemen	?ar:adi	?amradi	the radio
aldʒamiʕah	aldʒami\$ah	the university	?alm:aS	?am:aS	the water
?alfadʒr	?alfadʒr	dawn	?an:ar	?amnar	the fire
?aduhr	?aduhr	noon	?aſari\$	?amʃari\$	the street

**Table III:** /m/ insertion in definite article

### 6. Discussion

There are two explanations underlying the deletion of glottal stop in Jizani Arabic. The first of which is that the glottal stop is deleted along with the vowel following it word initially and this is explained by two deletion processes as ruled out under 3. The other explanation is that the initial syllable with the glottal stop in a phonological segment is deleted entirely. Here, we can assume that these words [?asri\$,?axdar, ?ustad] are syllabified as  $[CV]\sigma$   $[CCVC]\sigma$  or  $[CVC]\sigma$ . After the deletion process, the syllabification is suggested to take this form  $[CCVC]\sigma$ . However, the final consonant (coda) might not be present in some words such as [?a\$la] and that still does not affect the syllable structure or the deletion process. The deletion of the glottal stop or the syllable in which it occurs can be motivated by frequency effect and by the fact that glottal stops are perceptually quite weak in some environments.

The /m/ neutralization is restricted to second person suffixes ending in /m/ changing its place of articulation into alveolar. On the other hand, third singular feminine suffix /t/ in perfect mood verbs changes its manner of articulation into nasal. The nasal /m/ and the alveolar /t/ can be found in other words where they do not occur in suffix such as [tahakum] and [bayt] for 'control and house 'with /m, t/ not realized as [n]. In both cases, we can assume that replacing /m, t/ in suffixes is a regular sound change affecting all the words in the specific phonetically conditioning environment as shown by the rule above under 4.

As to the insertion of /m/ in place of [1] in the definite article, it occurs when the speaker and hearer have a mutual or more specific knowledge of the referents. For instance, in a second mention of the noun or with unique referents like the sun or the moon. This can be identified with specific and unique nouns that refer to concepts or objects including common and proper nouns. When referring to generic nouns, /l/ is not realized as /m/ and here it is suggested that the referents, though generally known, but not of higher degree of specificity as with the specific and unique nouns. Frequency of use can partially account for this pattern. This case contradicts Haselwood and Watsons' (2013) study who argue that dialects in southern Saudi Arabia (where Jizani Arabic is one of) and Yemen replace /l/ with /m/in the definite article in any position. In fact, the word Yemen itself as in table III does not take the definite article /m/ or its variants. Using /m/ in definite article is the norm in southern Saudi Arabian dialects which share a lot of morphological and lexical processes with the neighboring Yemeni dialects. However, the definite article /m/ shows a unique pattern with certain class of words in Jizani Arabic as explained above.

## Acknowledgement

This paper was conducted with the help of my family especially my parents and wife whose pronunciation inspired me to study the above mentioned phonological aspects. They also facilitated data collection and examining the distribution of sounds in various phonological environments to describe the target patterns. I also thank Shelece Easter day for her review and comments to improve this paper.

# **Conclusions**

Jizani Arabic is characterized by the deletion of glottal stop, neutralization of /m/ in particular suffixes, and by using /m/ in place of /l/ in the definite article. These phonological aspects are informed by morphological and morph syntactic factors that explicate them. The motivation behind some phonological patterns can be referred to the frequency of use. These aspects are typical to Jizani Arabic and shared among the majority of speakers. The sound change patterns show regular sound changes that affect all the words in the phonetic environment that condition the changes. Variation is still present among speakers, yet the phonological aspects are distinctive.

# References

Haselwood, B., & Watson, J. (2013). The Arabic Definite Article Does not assimilate. LWPLP, 34-53.

Kopczynski, A., & Meliani, R. (1993). The Vowels of Arabic and English. *Papers and Studies in Contrastive Linguistics, XXVII, 184-192*.

Mahmood, L., & Tawfeeq, L. (2006). Articles in English and Arabic. *College of Basic Education Researchers Journal*, 4, 3, 267-286.

Watson, J (2011) South Arabian and Yemeni dialects. Salford Working Papers in Linguistics and Applied Linguistics, 1, pp. 27-40

Watson, J. (2007). The phonology and morphology of Arabic. Oxford: Oxford University Press.